



Overcurrent Circuit Breaker
thermal and magnetic trip characteristic

Data Sheet

410.073.270

sheet 1 of 16

Ers. f. gl. Nr. v. 26. 6. 89

2210-T

ORIGINAL

Technical Data:

Voltage rating:	AC 250 V; DC 65 V; 3AC 415 V
Current rating range: main circuit	0.05...16 (0.05...16) A
Standard current rating range:	0.1 0.2 0.3 0.4 0.5 0.6 0.8 1 1.5 2 2.5 3 4 5 6 8 10 12 16 A
Current rating: auxil. circuit:	1 A resistive load
Protection class: (VDE 0631/DIN 40014)	II (to mounting drawing sheet 12/14/16 fig.2)
Environmental protection: (DIN 40050)	operating area IP 30 terminal area IP 00
Test class: (VDE 0631, 10.4)	I > 10 000 operating cycles at $1xI_n$
Mech. life:	> 20 000 operating cycles
Temperature range: (VDE 0631)	0...55°C
Comparative Tracking Index:	CTI 400
Insulation group: (VDE 0110) operating area:	C AC 250 V; test voltage AC 4000 V (double insulation to VDE 0631)
mounting area:	C AC 250 V; test voltage AC 2000 V
betw. main and auxil. circuit:	C AC 250 V; test voltage AC 2000 V
betw. auxil. circuits 11-12/23-24:	A AC 250 V; test voltage AC 1000 V
betw. main circuits:	C AC 415 V; test voltage AC 3500 V
Insulation resistance:	> 100 MΩ (DC 500 V)
Ultimate trip: (at 23°C)	see time/current characteristic curve, sheet 3 to 11
Rupture capacity: character. T2: characteristic F1, M1, M3, T1:	$0.1...16A \ 15xI_n$ } (>3 operating cycles $0.1...5 A \ 400 A$ } CO-OCO-OCO) $6...16 A \ 800 A$ } at $\cos \phi = 0.95$ or $L/R = 2.5 \text{ ms}$
Vibration:	F1 characteristic: 3 g (57-500 Hz), $\pm 0.23 \text{ mm}$ (10-57 Hz) M1, M3, T1, T2 characteristic: 5 g (57-500 Hz), $\pm 0.38 \text{ mm}$ (10-57 Hz) test to IEC 68-2-6 test Fc (10 frequency cycles)
Shock resistance:	F1 characteristic: 25 g (11 ms) shock direction 1 to 5 10 g (11 ms) shock direction 6



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M1,M3,T1,T2 characteristic:

25 g (11 ms) shock direction 1 to 5

20 g (11 ms) shock direction 6

see sheet 12/14 fig.3

test to IEC 68-2-27 test Ea

Corrosion resistance:

96 hours at 5% saltspray

test to IEC 68-2-11 test Ka

Humidity:

240 hours at 95% RH at +40°C

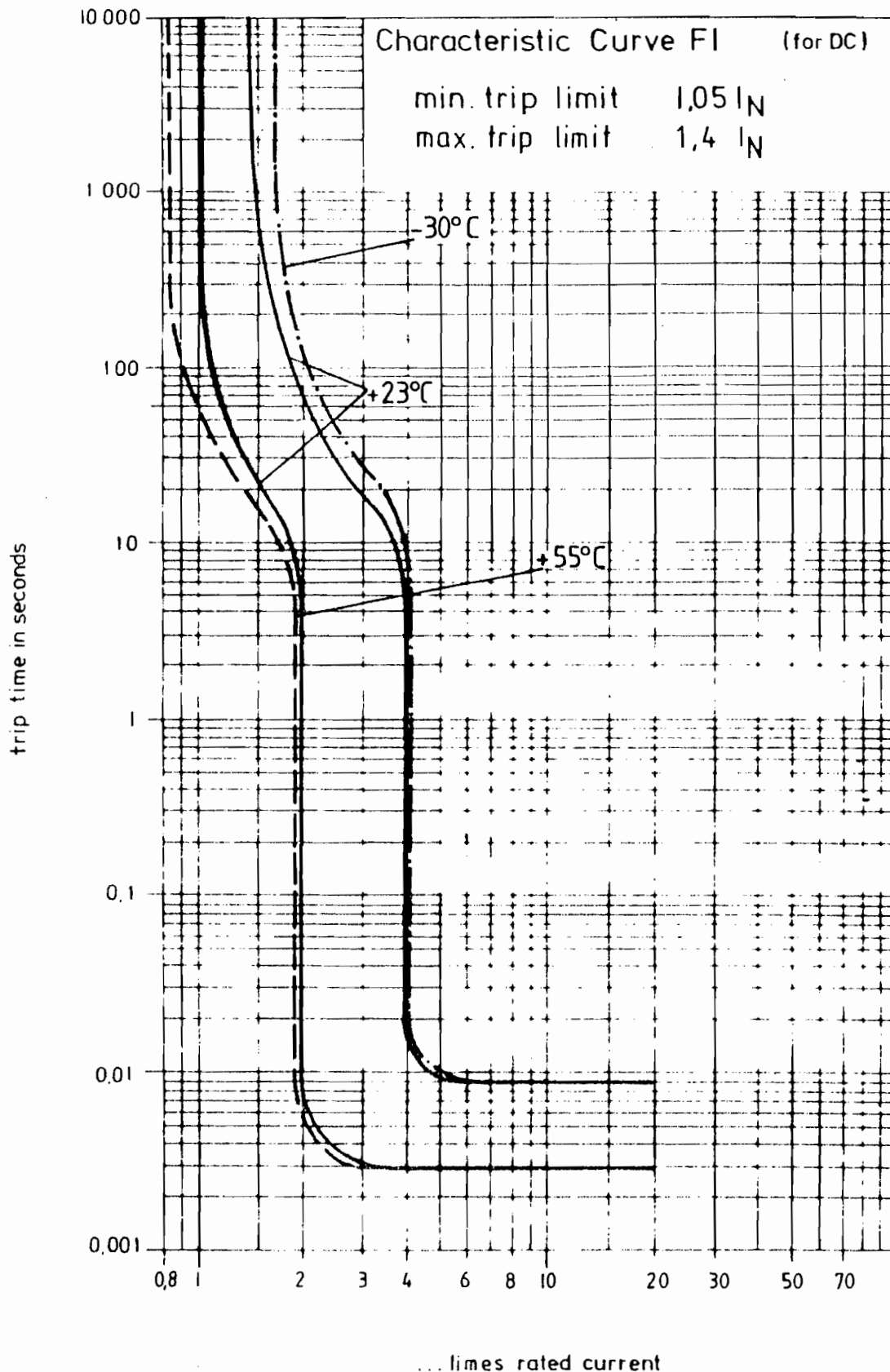
test to IEC 68-2-3 test C

Multipole combinations are suitable for use in 240/415 V mains.
(Voltage towards ground: 250 V max.)

The information furnished is believed to be accurate and reliable. However, E-T-A assumes no responsibility for its use. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved.

410.053.212

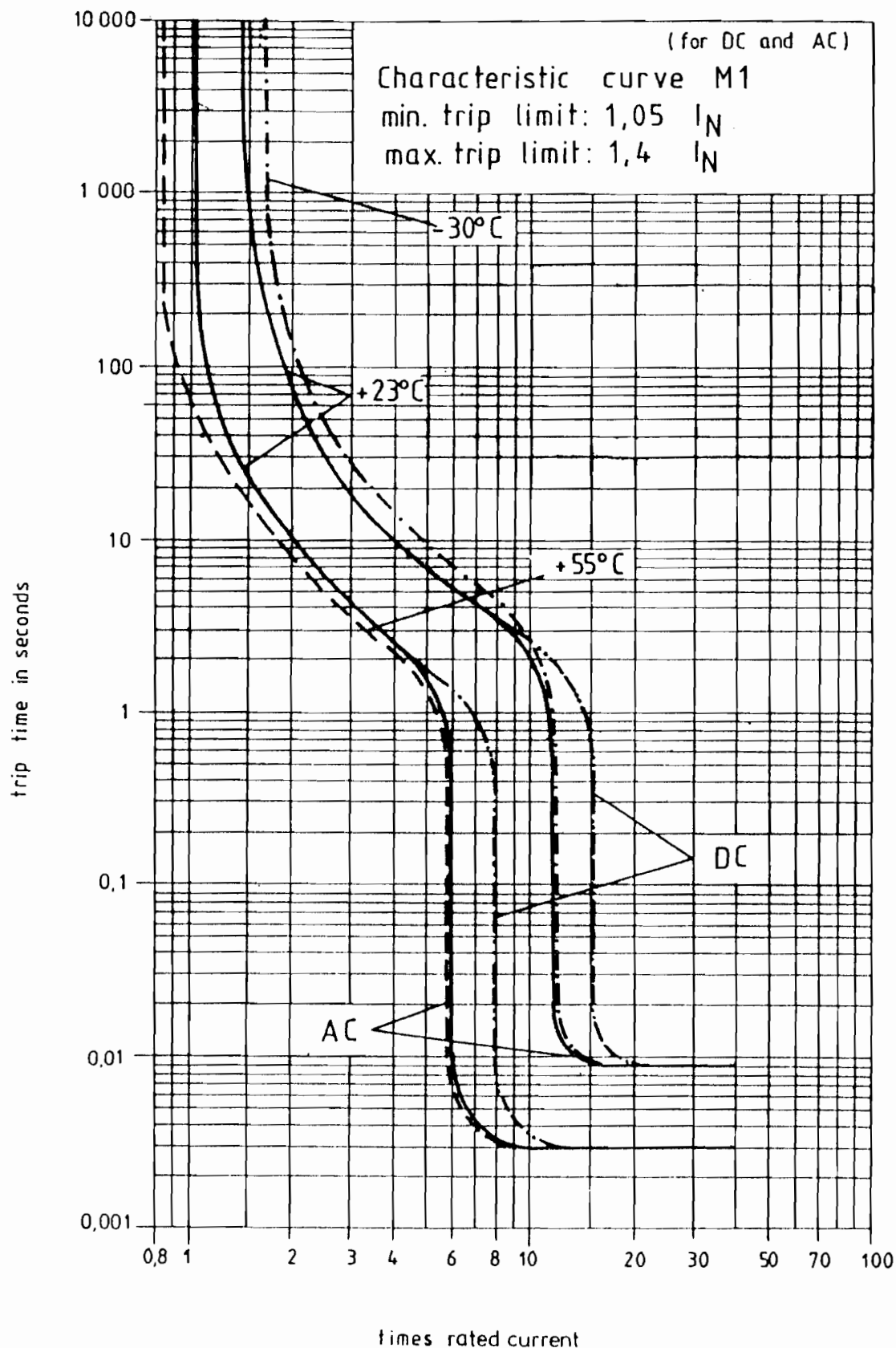
0,05 - 16 A



410.053.215 BL1

rated value : Q05- 7,5 A

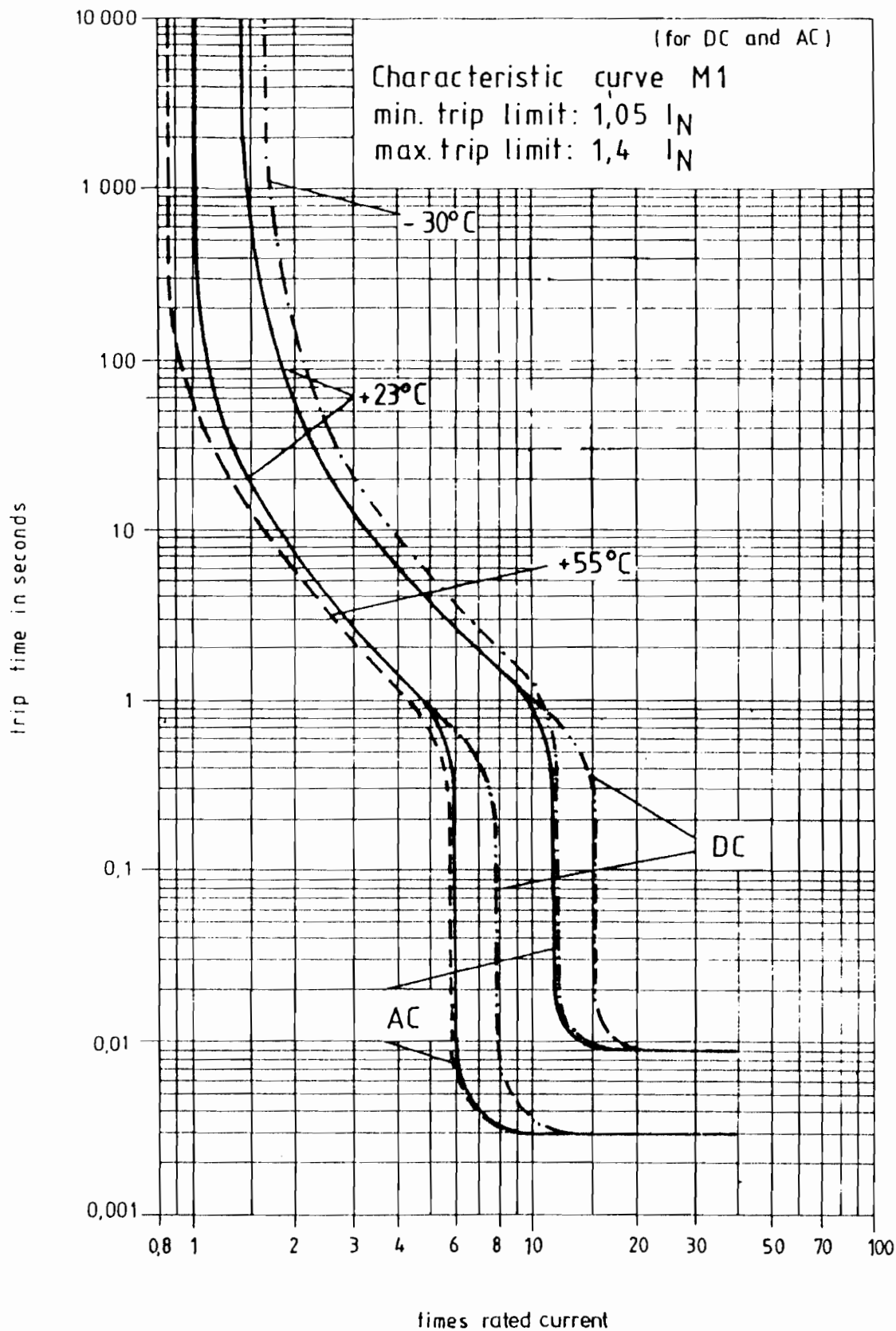
Ers.f.gl.Nr. v. 25.7.83



410.053.215 Bl.2

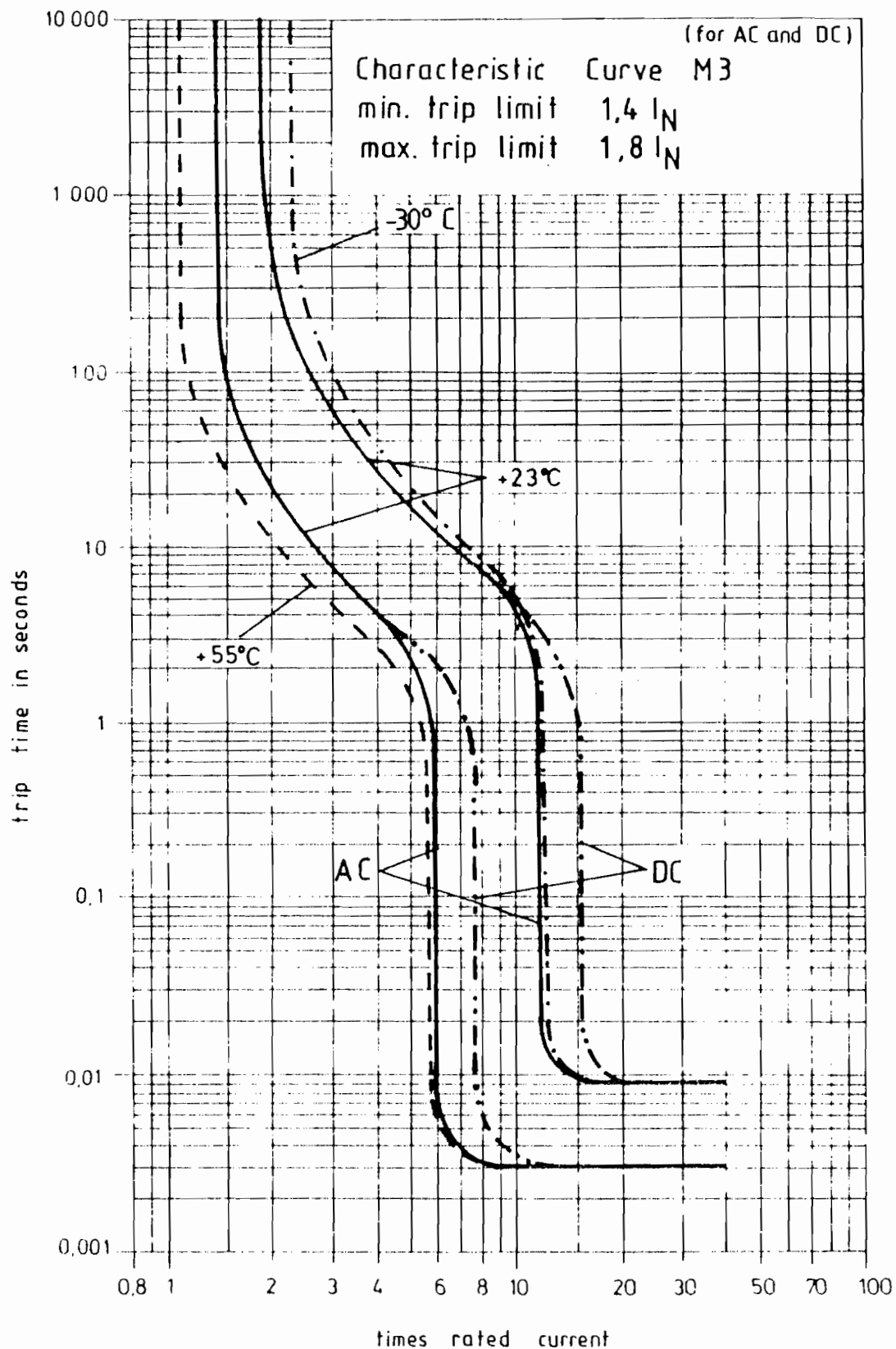
rated value: 8 - 16 A

Ers. f. gl. Nr. v. 25.7.83



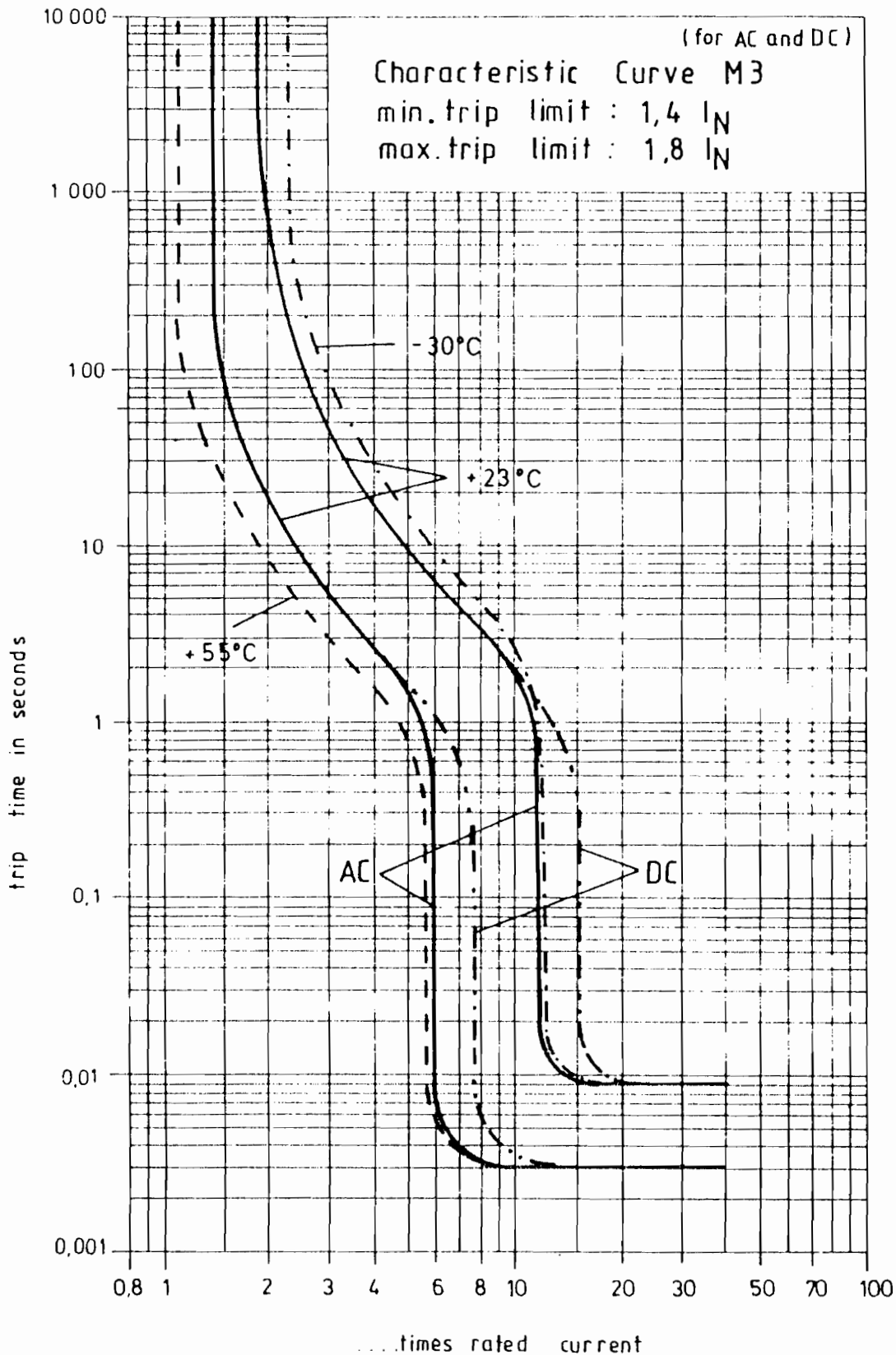
410.053.238 Bl 1

rated value : 0,05 - 55A



410 053 238 Bl.2

rated value . 6 - 16 A

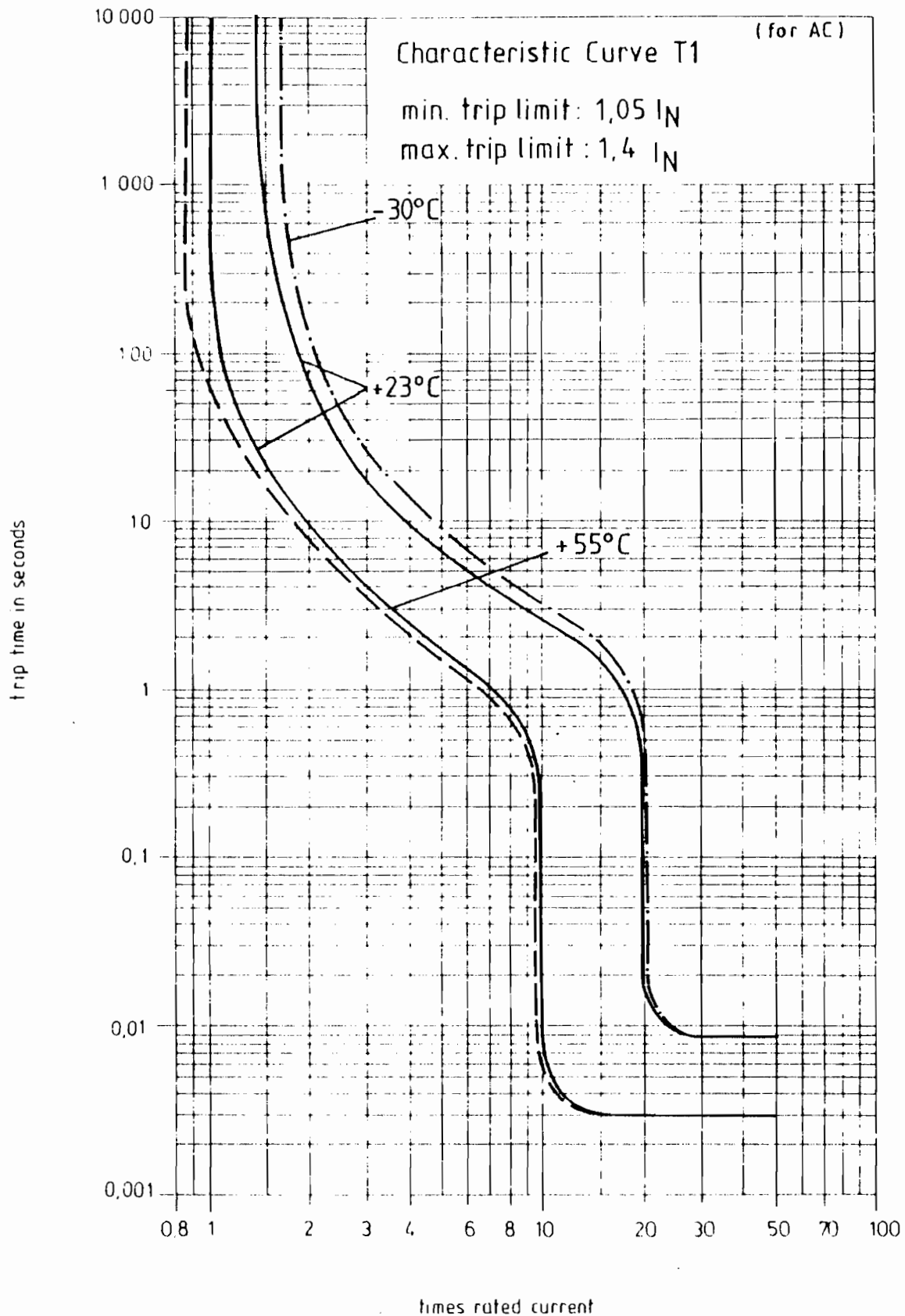


075.394

f	AM11827	15.4.87 Jä.
p	AM12614	26.6.89 a/b

410.053.217 Bl.1

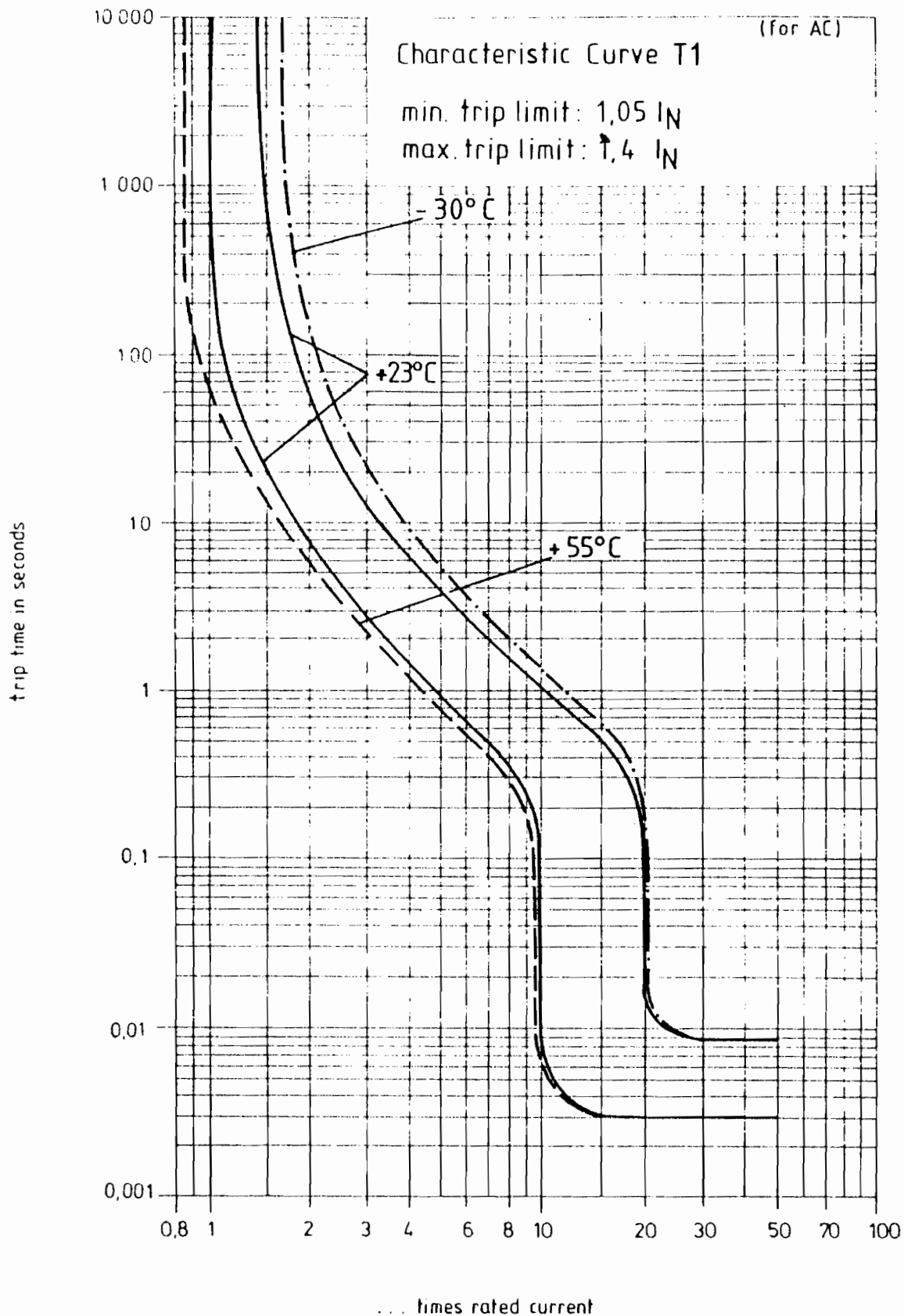
rated value : 0,10-7,5A



d	AM11417	24 3 86 $\frac{1}{2}$ h	g	AM12614	26 6 89 <i>alld</i>
e	AM11656	6 11 86 $\frac{1}{2}$ h	h	Bl 12,14 16	19.4.90 <i>alld</i>

410 053 217 B12

rated value 8-16 A

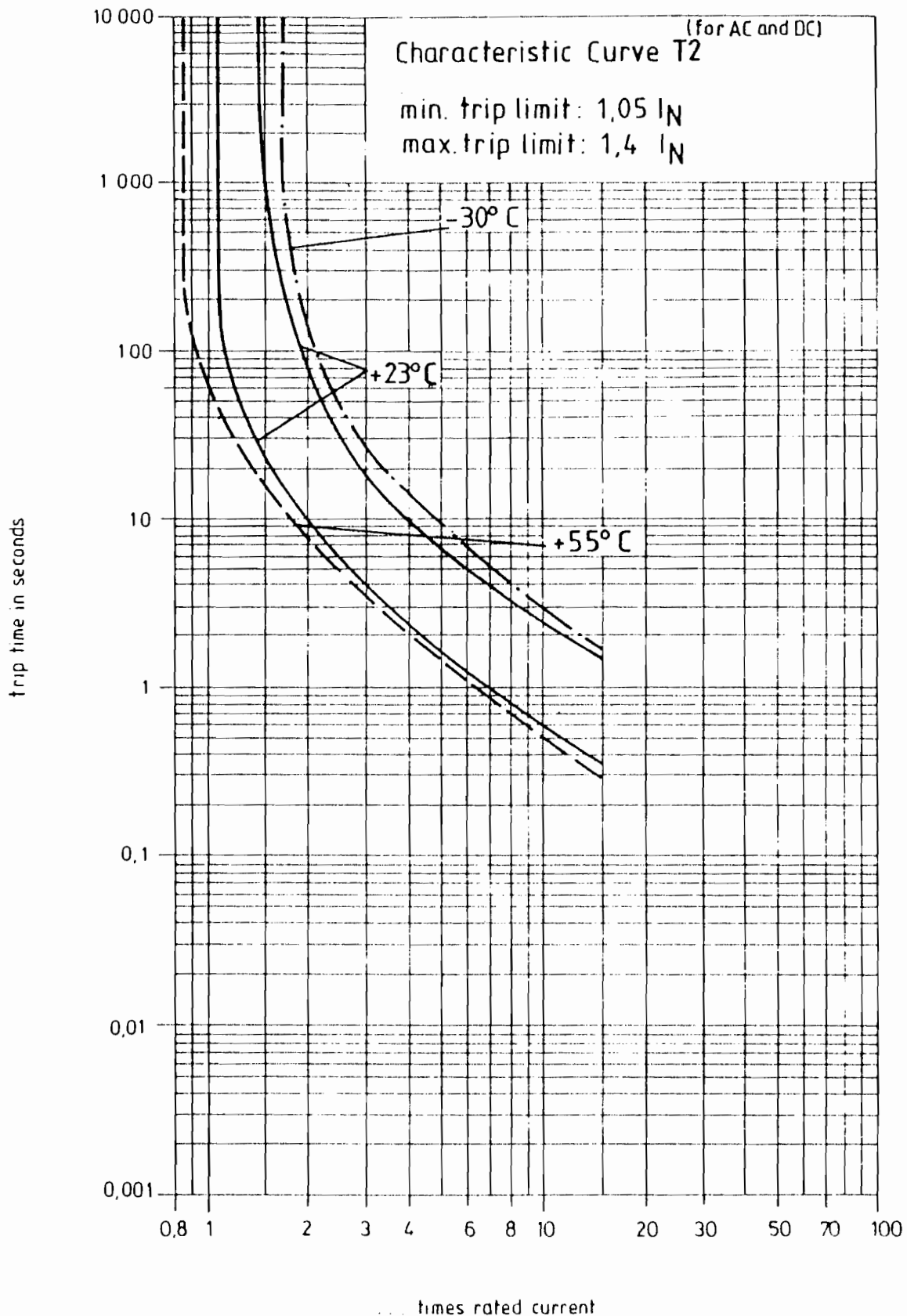


75.394

d	AM11417	24.3.86	g	AM12614	26.6.89
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410.051.278 Bl.1

rated value : 0,10 - 7,5 A

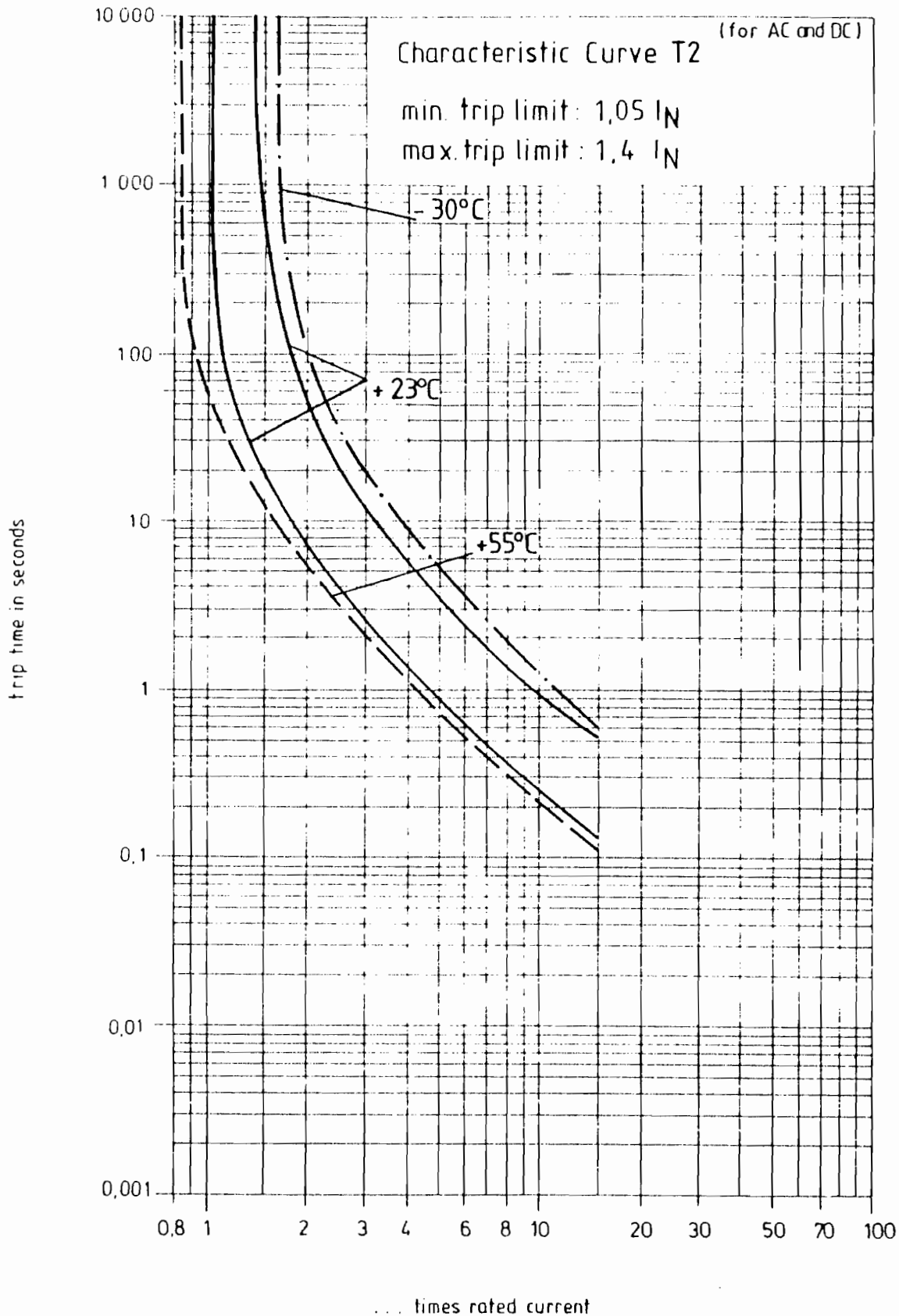


75 394

d	AM11417	24.3.86	g	AM12614	26.6.89
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410051278 Bl. 2

rated value 8-16 A

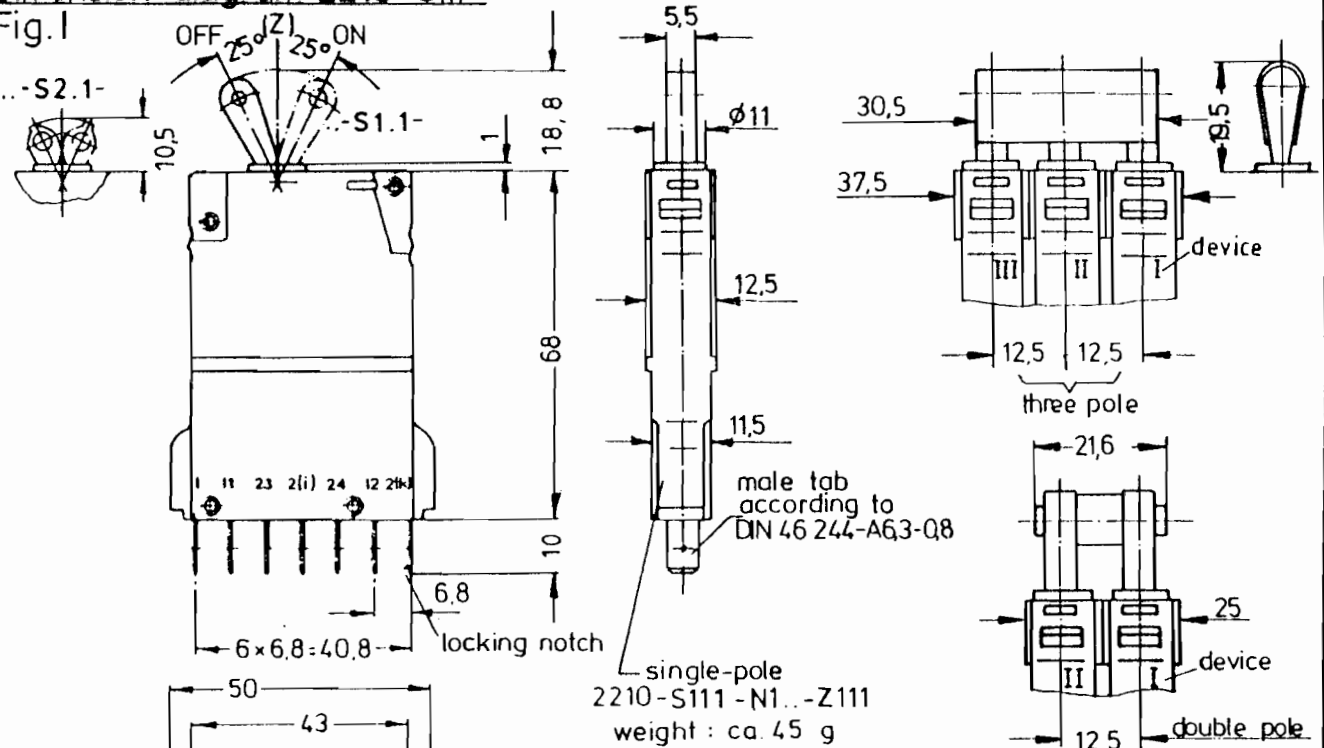


075 394

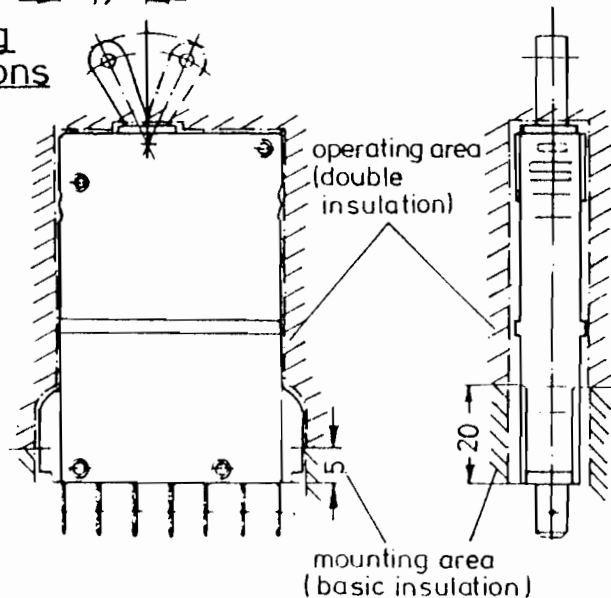
d	AM 11417	24.386 μ h	g	AM 12614	26.689 μ h
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Dimension diagram 2210-S...-

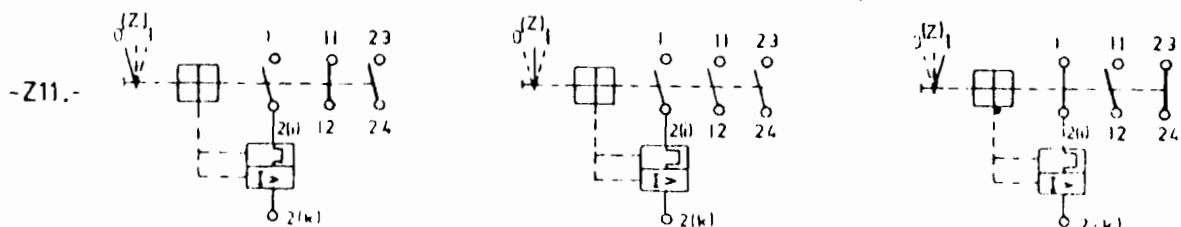
Fig. 1



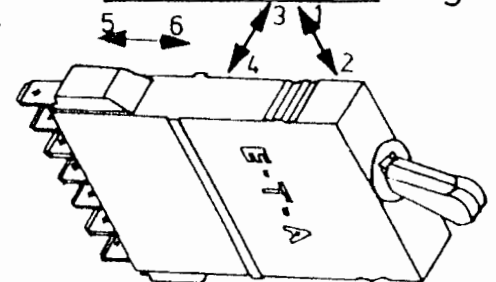
Mounting
Dimensions
Fig. 2



Internal wiring diagrams



Shock direction Fig. 3

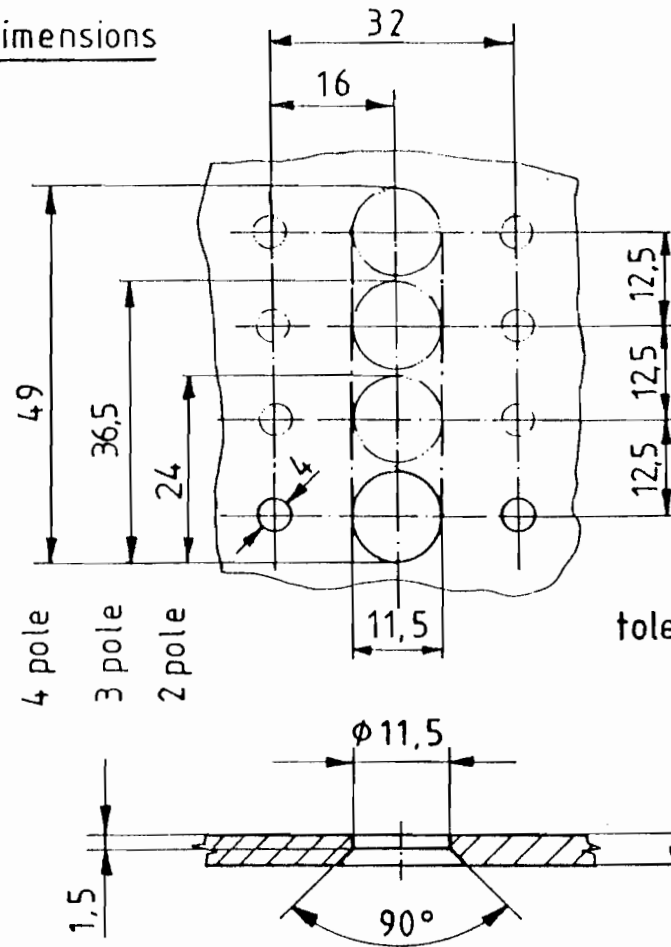


Accessory

- terminal blocks: 23-P10-Si
63-P10-Si
17-P10-Si
- draw-off bow: Y 30139802
- spring: Y 302974.01 (for type 23,63)
Y 302974.11 (for type 17)

Splashcover

- single pole X 211 117 02
- 2 or 3 pole X 211 118 01
- 4 pole X 211 119 01

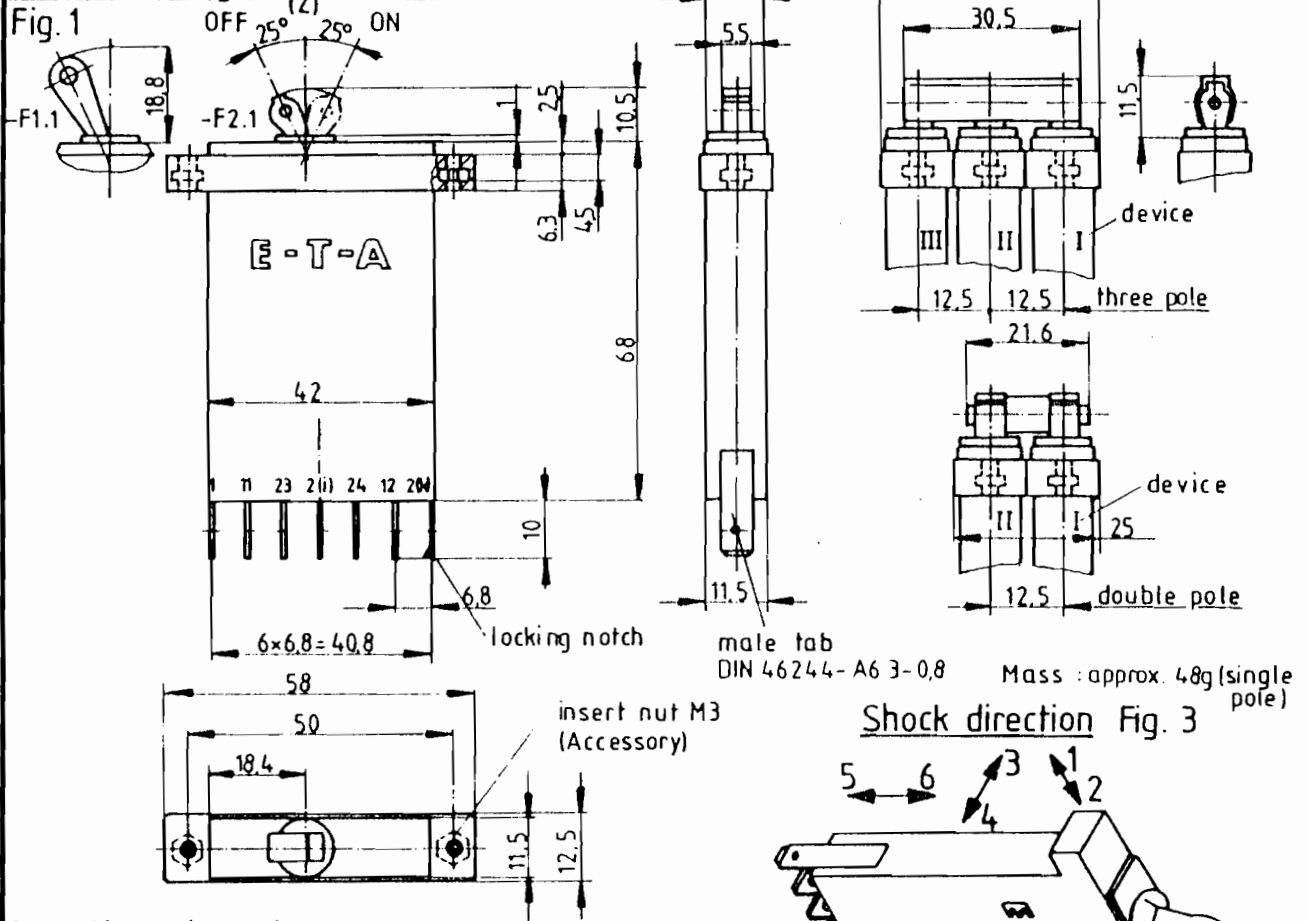
Mounting dimensions2210-S...

tolerances : DIN7168-m

Recessed as shown if the front panel is >1,5 mm

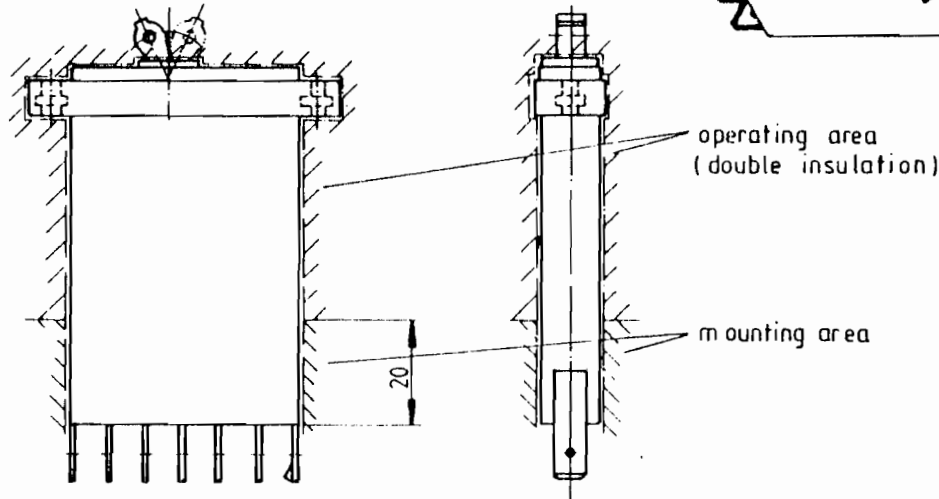
Mounting dimensions for devices with splash cover (accessory for 2210-S...-)
see dimensional drawing 281.023.310 (single pole)
281.023.311 (2 or 3 pole)
281.023.309 (4 pole)

Dimension diagram 2210-F...

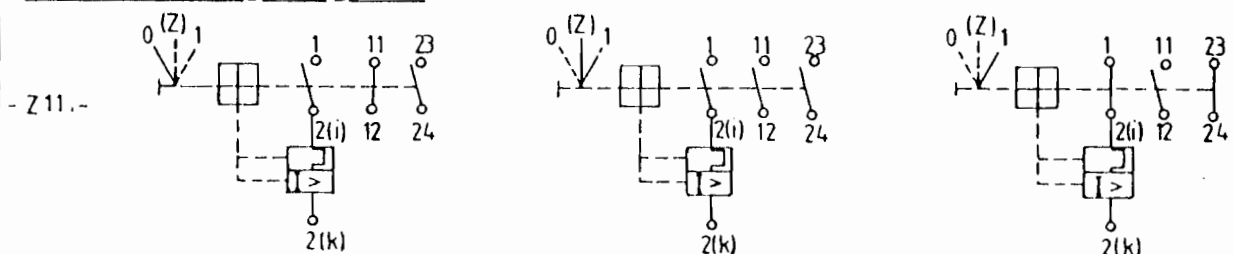


Mounting dimensions

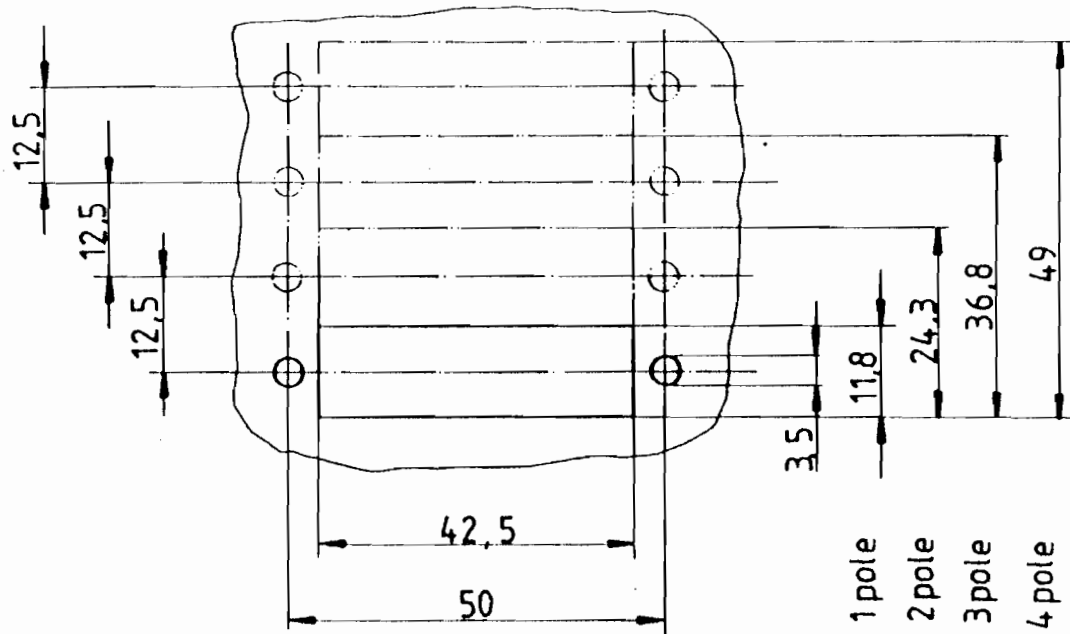
Fig. 2



Internal wiring diagram



Mounting dimensions 2210-F...



tolerances: DIN 7168-m

E-T-A®

ETA Elektrotechnische Apparate GmbH
D-8503 Altdorf bei Nuernberg (BRD)
Tel.: (09187) 10-1 Telex 06-24461

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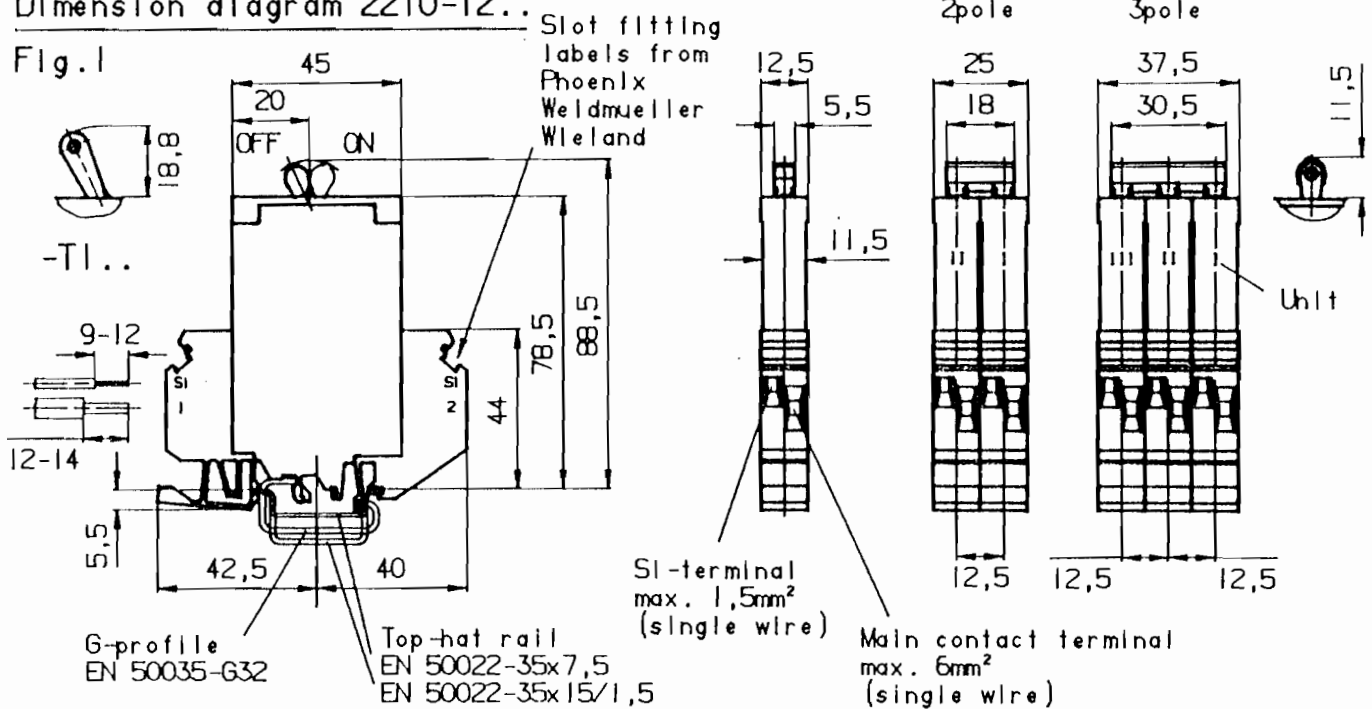
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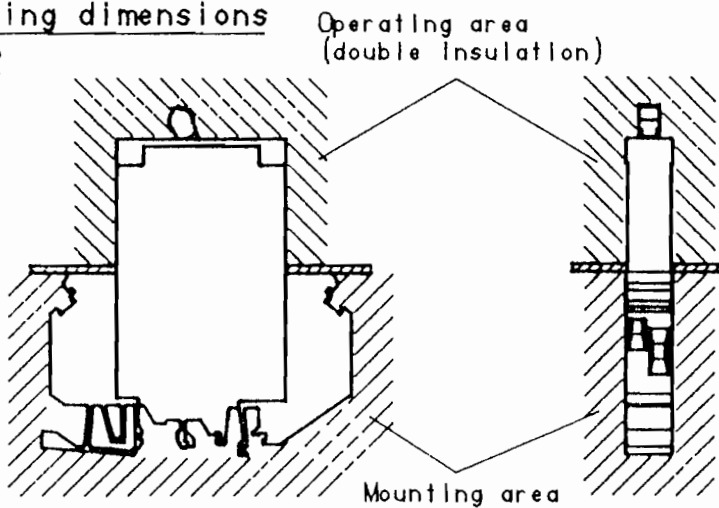
Dimension diagram 2210-T2..

Fig.1



Mounting dimensions

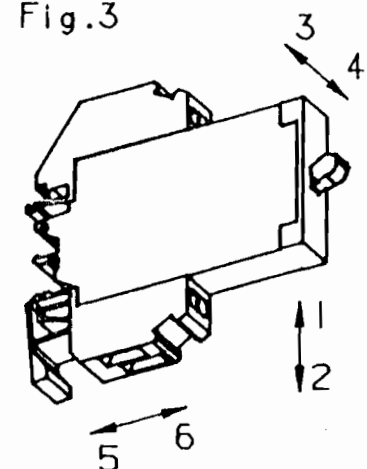
Fig.2



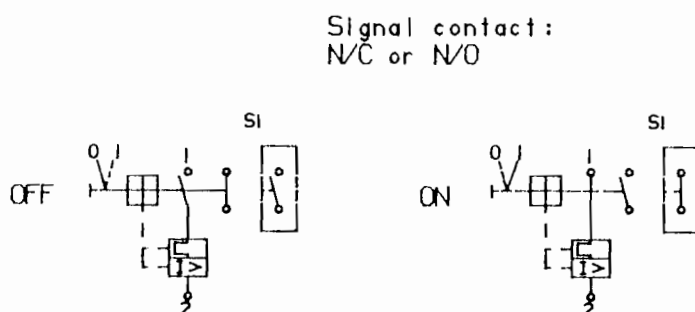
Mass (single pole): approx. 60g

Shock direction

Fig.3



Internal wiring diagram



Name: SI

Ersatz fuer: -

Reg.-Nr.: -

Ae-Stand: - h



2210-...
Selectivity Rating

Appendix to
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ETA Current rating (A)	Back-up fuse for characteristic curve F1	Selective up to ... A	Back-up fuse for characteristic curve M1	Selective up to ... A
0.1	M0.2	1.5	M0.63	4.7
0.2	M0.4	3.0	M1	7.5
0.3	M0.63	4.7	M1.6	12
0.4	M0.8	6.0	NH2	10
0.5	M1	7.5	NH2	10
0.6	M1.25	9.4	NH4	25
0.8	M1.6	12	NH4	25
1.0	NH2	15	NH4	25
1.5	NH4	35	NH6	50
2.0	NH4	35	NH10	100
2.5	NH6	60	NH10	100
3.0	NH6	60	NH10	100
4.0	NH10	110	NH16	200
5.0	NH10	110	NH16	200
6.0	NH10	110	NH20	250
8.0	NH16	200	NH25	380
10	NH16	200	NH25	380
12	NH20	300	NH35	580
16	NH25	350	NH35	580



2210-...
Max. back-up fuse to ensure
short-circuit protection

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ETA Current rating (A)	Back-up fuse (DIN57636) rating (A)	Selective up to ... A
0.1	} optional	
0.2		
0.3		
0.4		
0.5		
0.6		
0.8	4	25
1.0	4	25
1.5	6	50
2.0	6	50
2.5	6	50
3.0	10	100
4.0	10	100
5.0	16	200
6.0	20	250
8.0	25	380
10.0	35	580
12.0	35	580
16.0	35	580

E-T-A®ETA Elektrotechnische Apparate GmbH
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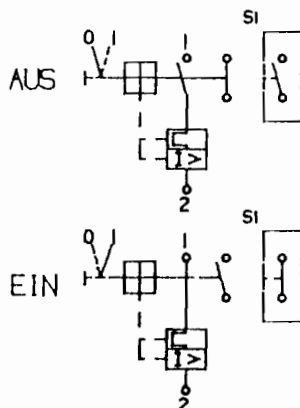
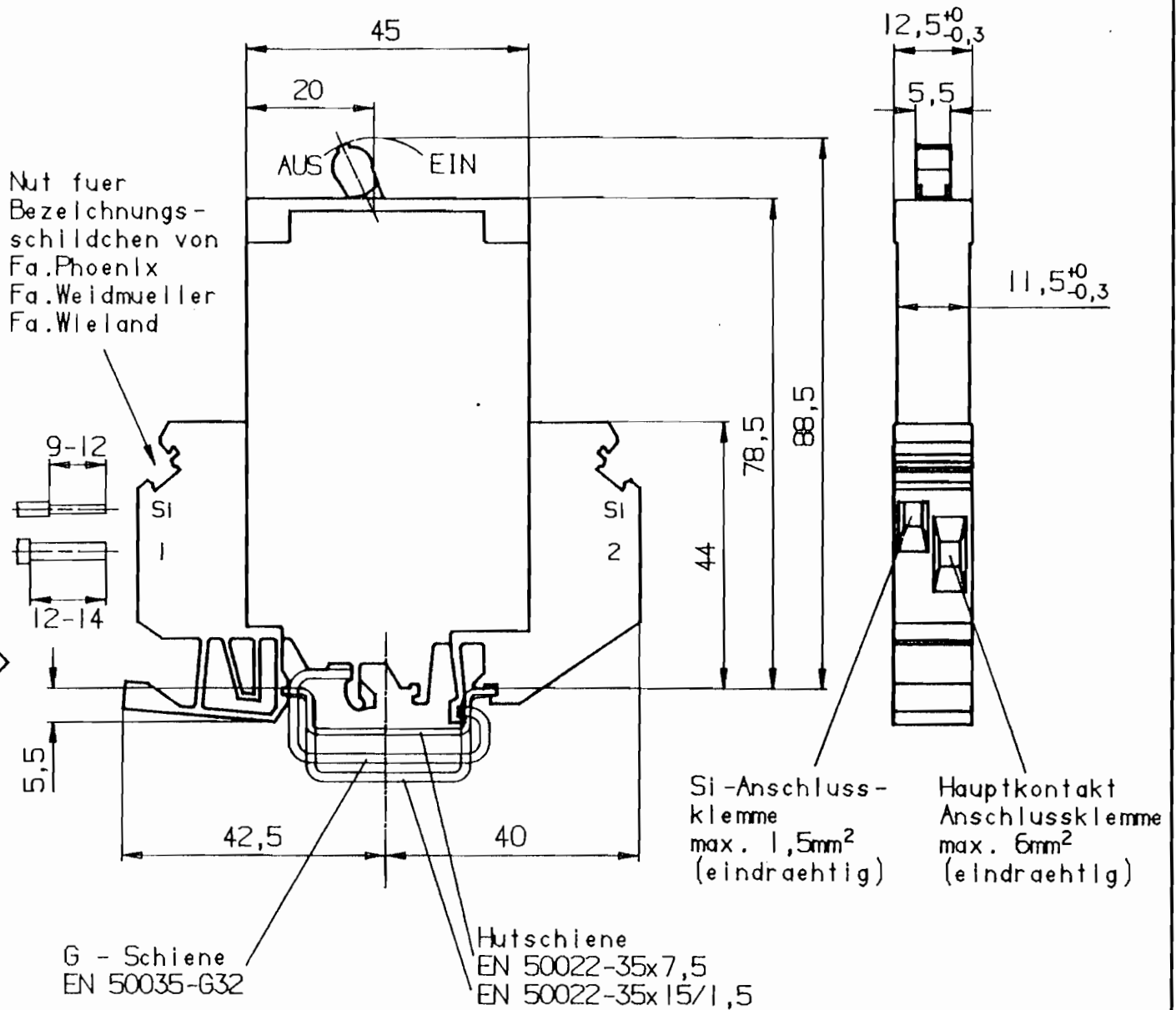
E-T-A Magnetic

2210-T...-...

Massbild

410.025.207

Blatt 1 von 1

Signalkontakt:
Oeffner oder
Schliesser

M 1:1

Name: SI

Ersatz fuer : gl.Nr.v.01.02.90

Reg.-Nr: -

Ae-Stand: -